## Students show off hi-tech homework Istook lauds state's Palm program

By Jim Stafford, Business Writer

Eighth-grader Geremi Davis unfolded his Palm handheld computer, punched up a program known as "Sketchy," and a drawing of the human digestive system popped up on the color screen.

When Geremi selected an arrow with his stylus, suddenly the picture was animated with food winding its way through the digestive system.

Way cool, dude.

Only, this wasn't some storebought, prepackaged animation. Geremi drew it and animated the picture as part of a project for his eighth-grade science class at the Mayfield Middle School in the Putnam City School District.

Geremi explained how he drew the background, then learned to animate the picture that helped demonstrate the digestive process.

The eighth-grader was one of about a dozen students from the Putnam City and Shawnee school districts who showcased their skills with the handheld devices Tuesday for about 50 people at the Presbyterian Health Foundation's Research Park Conference Center.

The students' audience was attending a conference that focused exclusively on the use of handheld devices in education and was sponsored by the nonprofit research institute SRI International of Menlo Park, Calif.

Assisting SRI in producing the conference called "America's Future Classroom: Advancing Learning With Handhelds" were Congressman Ernest Istook, R-Warr Acres, and state schools Superintendent Sandy Garrett.

Conference participants came to Oklahoma to learn about a unique program that has put handheld computers into the hands of 2,400 Oklahoma middle school and high school students.

"Education Week magazine has said that Oklahoma is second in the nation in technology connection, and we're very, very proud of that," Garrett said. "It is not learning as usual. Truly, it is the power of the computer in your hand."

Istook has been a proponent of placing handheld computers in public schools and secured nearly \$2 million in federal grants over the past three years to fund the Oklahoma pilot program.

"We have the largest base anyplace in the country that is using handheld computing in the classroom – 2,000 students in the Putnam City School District and 400 students in Shawnee public schools," he said. "The key is that with this program students don't have to share and have part-time access to a computer. It's a one-on-one model, one student, one handheld. You get 90 percent of the computing capability for 20 percent of the cost."

Garrett said the program costs about \$200 per handheld and that the loss rate has been extremely low, 3 percent to 5 percent. Istook said that is the same as the loss rate of textbooks.

Students from Sharon Davis' freshman English class in Shawnee demonstrated the flexibility the handhelds have given them, from having their assignments beamed right into the device from their teacher or classmates, to completing essay assignments, to collaborating in team projects.

Davis held up her device and declared it to be "the big leveler" for her students. Students who come into the class with superior skills are challenged to "think outside the box," while those who might struggle in a traditional setting are inspired by the handhelds.

"The communication, the problem solving techniques, as well as thinking outside the box, all of those are going to be important in any career they choose." she said.

In Mark Charles' eighth-grade science class at Putnam City's Mayfield Middle School, the handheld computers have been in use since the beginning of the school year and students are still engaged, he said.

"The novelty of it has not worn off," Charles said. "The students will write more if they are typing than if they were using pencil and paper. Even students with lesser ability, I can get more work from them than with pencil and paper. It's like a Game Boy that thinks."



**BY STEVE SISNEY, THE OKLAHOMAN** Katie Funk, left, and Melanie Gerins, eighth-graders at Western Oaks Middle School in the Putnam City School District, check their Palm handheld computers as they consult with their teacher, Ty Bell, before making presentations at a conference Tuesday at the Presbyterian Health Foundation's Research Park Conference Center.